

REMARKS

This Amendment is fully responsive to the non-final Office Action dated October 17, 2008. Claims 1-3 and 10-12 are pending in the present application. With this Amendment, claims 1 and 10 have been amended. No new matter has been introduced by the amendments made to the claims. Favorable reconsideration is respectfully requested.

In the Office Action, the Examiner objects to the drawings filed on August 4, 2008 alleging that new corrected drawings in compliance with 37 CFR 1.121(d) are now required. Additionally, the Examiner objects to the drawings on the basis that the Figs. A-D and reference number 0062 illustrated therein, are not mentioned in the specification. Moreover, the Examiner objects to the disclosure on the basis that the "Brief Description of the Drawings" does not include a description of Figures A-D.

The Applicants' representative briefly discussed the above objection to the drawings on January 20, 2009, and it was agreed that the two drawings filed (i.e., Figs. 12 and 13) on August 8, 2008 would be re-submitted along with a drawing transmittal indicating that the two drawings (i.e., Figs. 12 and 13) are being provided as formal replacement drawings.

Additionally, during the discussion, it was pointed out that when drawings are objected to corrections are required to the objected drawings only. In other words, re-submission of all the drawings in the application (e.g., Figs. 1-13) is not required when only certain drawings are objected to (see MPEP 608.02(b)). The only requirement is that the corrected drawings (labeled as "replacement sheets") be filed for the drawings being objected to in compliance with 37 CFR 1.121(d).

Accordingly, the Applicants have re-submitted Figs. 12 and 13 as formal replacement sheets. The corrected drawings each include a "prior art" legend. Additionally, none of the figures in the present application (i.e., 1-13) are labeled as Figs. A-D or include reference number 0062. Thus, no correction is believed to be required to the specification. Withdrawal of the objection to the drawings and the specification are respectfully requested.

In the Office Action, the Examiner has rejected claims 1-3 and 10 under 35 U.S.C. 103(a) as being unpatentable over Ishiwata (U.S. Patent Application Publication No. 2002/0016957,

hereafter "Ishiwata") in view of Hsieh (U.S. Patent No. 7,093,241, "Hsieh"), and further in view of Merrick et al. (U.S. Patent No. 6,339,841, hereafter "Merrick"). The Applicants have amended independent claim 1 to help further distinguish the present invention from the cited prior art. As amended, claim 1 recites the following features:

“[a] program product, comprising:

a program linking program recorded on a storage medium for causing a computer having a memory to function at least as:

linking means for linking a plurality of unlinked programs to form a pre-linked program for advancing toward the completion of a linked program;

storage means for storing the pre-linked program in the memory before completion of the linked program; and,

management means for causing the linking means to preferentially perform linking of the plurality of unlinked programs, to form the pre-linked program, in a predetermined priority order such that a cumulative sum of sizes of the unlinked programs is within a range in which overflow of a predetermined capacity of the memory does not occur, wherein the predetermined priority order is an increasing order of frequency of use of each of the plurality of unlinked programs in the plurality of linked programs.” (Emphasis added).

The features emphasized above in independent claim 1 are similarly recited in independent claim 10 (as amended). Specifically, claim 10 is a method including steps directed to the features of the management means of claim 1.

According to claim 1 (and similarly recited in independent claim 10), the pre-linked program is formed by selecting unlinked programs to be linked in "an increasing order of frequency of use of each of the plurality of unlinked programs in the plurality of linked programs" such that a sum of the unlinked programs is within a range in which overflow of the memory capacity does not occur. In the pre-linked program stored in the memory before completion, linking is performed in such a manner that the number of redundant unlinked programs becomes small, so that an effect of reducing storage of the redundant unlinked programs in pre-linked programs can be achieved. No such features or advantages (as noted

above) are believed to be disclosed or suggested by the cited prior art.

In the Office Action, the Examiner relies on the combination of Ishiwata, Hsieh and Merrick for disclosing or suggesting all the features of independent claims 1 and 10. However, the Examiner relies primarily on Hsieh and Merrick for disclosing or suggesting all the features of the management means emphasized above in independent claim 1 (and similarly recited in independent claim 10).

However, Hsieh discloses a technology related to a memory overflow check and a memory that is managed "within a range in which overflow of a memory capacity of the sum unlinked programs does not occur." However, as acknowledged by the Examiner, Hsieh fails to disclose or suggest the features emphasized above in independent claim 1 (and similarly recited in independent claim 10). The Examiner relied on Merrick for disclosing or suggesting these features.

Specifically, the Examiner asserts that Merrick discloses linking "in an increasing order of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs." However, the disclosure of Merrick is limited to, in a dynamic linking of a Java program, only the minimum components of the class which are necessary for commencing processing of the class being introduced so as to reduce the memory needed and increase the speed of operation.

Thus, Merrick does not disclose forming a pre-linked program by selecting unlinked programs to be linked in "an increasing order of frequency of use of each of the plurality of unlinked programs in the plurality of linked programs" and linking the same.

Thus, the combination of Ishiwata, Hsieh, and Merrick do not disclose or suggest forming a pre-linked program by selecting unlinked programs to be linked and linking each unlinked program in a priority order in "an increasing order of frequency of use of each of the plurality of unlinked programs in the plurality of linked programs," as recited in independent claim 1 (and similarly recited in independent claim 10).

Based on the above discussion, no combination of Ishiwata, Hsieh and Merrick would result in, or otherwise render obvious, independent claims 1 and 10. Likewise, no combination of Ishiwata, Hsieh and Merrick would result in, or otherwise render obvious, claims 2 and 3 at

least by virtue of their dependencies from independent claim 1.

In the Office Action, claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiwata in view of Hsieh. The Applicants maintain that the cited prior art fails to disclose or suggest all the features recited in independent claims 11 and 12. For example, claim 11 recites the following features:

“[a] program product comprising a program linking program recorded on a computer-readable storage medium for causing a computer having a memory function to function at least as:

linking means for linking a plurality of unlinked programs to form a pre-linked program for advancing toward the completion of a linked program;

storage means for storing the pre-linked program in the memory before completion of said linked program; and

management means for causing the linking means to preferentially perform linking of the plurality of unlinked programs, to form the pre-linked program, in a predetermined priority order such that a cumulative sum of sizes of the unlinked programs is within a range in which overflow of a predetermined capacity of the memory does not occur, wherein the predetermined priority order is a decreasing order of time for linking each of the plurality of unlinked programs upon execution.”

The features noted above in independent claim 11 are similarly recited in independent claim 12. Specifically, claim 12 is a method including steps directed to the features of the management means of claim 11.

According to claims 11 (and similarly recited in independent claim 12), a pre-linked program is formed by selecting unlinked programs to be linked and linking unlinked programs in "a decreasing order of time for linking each of unlinked programs upon execution" such that a sum of the unlinked program is within a range in which overflow of the capacity of the memory does not occur.

When an application program as a linked program is to be executed, a special effect can be achieved by which the execution time for forming an application program by adding and linking remaining unlinked program to the pre-linked program is shortened. No such features or

advantages (as noted above) are believed to be disclosed or suggested by the cited prior art.

In the Office Action, the Examiner relies on the combination of Ishiwata and Hsieh for disclosing or suggesting all the features of independent claims 11 and 12. However, the Examiner relies primarily on Ishiwata for disclosing or suggesting all the features of the management means emphasized above in independent claim 11 (and similarly recited in independent claim 12).

In the Office Action, the Examiner also asserts that Ishiwata discloses linking "in a decreasing order of time for linking each of the plurality of unlinked programs upon execution." However, Ishiwata only discloses that a gene which makes the evaluation value higher as the program size of the executable object (corresponding to the linked program of the present invention) is used to link the intermediate object in a linking order which makes the size of the executable object be the minimum. Ishikawa does not disclose linking "in a decreasing order of time for linking each of unlinked programs upon execution." Further, time for linking upon execution is not disclosed in Ishiwata.

Thus, the combination of Ishiwata and Hsieh fails to disclose or suggest forming a pre-linked program by selecting unlinked programs to be linked and linking each of the unlinked programs in a priority order of "a decreasing order of time for linking each of unlinked programs upon execution," of claim 11 (and similarly recited in independent claim 12).

Based on the above discussion, no combination of Ishiwata and Hsieh would result in, or otherwise render obvious, independent claims 11 and 12.

In view of the foregoing amendments and remarks, all the pending claims are now believed to be in condition for allowance. Withdrawal of the claim rejections in the outstanding Office Action is respectfully requested.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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